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(59) Field of Search

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(54) Abstract Title

A GSM-DCS dual-band transmit-receive switch for a mobile telephone

(57) Receive-transmit switches 1,2 for two bands are coupled by a diplexer 3 to an antenna 4. In switch 1, PIN diodes D1 and D2 are rendered conductive by a positive signal at control terminal SW1 to couple the transmit port EM1 to the diplexer and to isolate the receive port RE1. When the signal at terminal SW1 is removed, the transmit port EM1 is isolated and the receiver port RE1 is coupled to the diplexer via quarter-wave section Q1. The signal at terminal SW4 acts correspondingly on switch 2. To improve the isolation of receiver port RE1 when transmitter port EM2 is active, a positive signal at terminal SW4 activates diode D2 in switch 1 as well as the diodes D3 and D4 in switch 2. Terminal SW1 acts analogously on D4. The diodes DA prevent current flowing from one control port to the other.

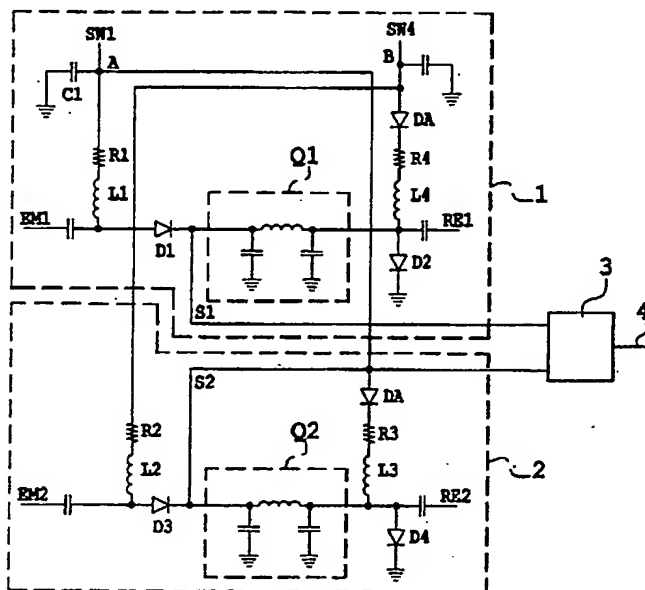


Fig. 3